

IN THE CLAIMS:

The following is a complete listing of the claims in this application, reflects all changes currently being made to the claims, and replaces all earlier versions and all earlier listings of the claims:

Claim 1 and 2. (canceled)

Claim 3. (previously presented): An image pickup apparatus comprising:

a photoelectric conversion area in which a plurality of pixels are two-dimensionally arranged in horizontal and vertical directions, wherein each of said plurality of pixels includes a photoelectric conversion element and an amplification element which amplifies a signal from said photoelectric conversion element to output the amplified signal;

a plurality of first vertical output lines which output sequentially signals from the pixels arranged in the vertical direction;

a plurality of second vertical output lines which output sequentially signals from the pixels arranged in the vertical direction;

a first horizontal output line which outputs sequentially the signals from said plurality of first vertical output lines;

a second horizontal output line which outputs sequentially the signals outputted from said plurality of second vertical output lines,

wherein said first horizontal output line is arranged on a side of a first side of said photoelectric conversion area, said second horizontal output line is arranged on a side of a

second side of said photoelectric conversion area, and said first side and said second side of said photoelectric conversion area are opposite to each other in the vertical direction;

a plurality of first load elements, wherein at least one first load element is arranged to fix a direction of current flowing through each of said plurality of first vertical output lines; and

a plurality of second load elements, wherein at least one second load element is arranged to fix a direction of current flowing through each of said plurality of second vertical output lines, and

wherein said plurality of first load elements and said plurality of second load elements are arranged on sides opposite to each other with respect to said photoelectric conversion area.

Claim 4 - 14. (canceled)

Claim 15. (previously presented): An apparatus according to claim 3, wherein said plurality of first vertical output lines and said plurality of second vertical output lines are arranged alternately.

Claim 16. (previously presented): An apparatus according to claim 3, further comprising an addition circuit which adds to each other the signals from a plurality of the pixels adjacent to each other.

Claim 17. (previously presented): An apparatus according to claim 3, wherein the amplification element and the first load element construct a source follower, and the amplification element and the second load element construct a source follower circuit.

Claim 18. (previously presented): An apparatus according to claim 3, wherein said plurality of first load elements are arranged between said photoelectric conversion area and said first horizontal output line, and said plurality of second load elements are arranged between said photoelectric conversion area and said second horizontal output line.

Claims 19 - 25. (canceled)